

WHAT IS CLAIMED IS:

1. A servo writer which writes a servo signal on a tape, which is paid off from a pay-off reel provided at an upstream side of a write head and is wound on a winding reel provided at a downstream side of said write head, by said write head, the writer comprising:

5 a pay-off side motor paying off the tape from the pay-off reel by rotating said pay-off reel;

a winding side motor winding the tape on the winding reel by rotating said winding reel;

10 a first capstan roller and second capstan roller which are provided at the upstream side and down stream side of said write head, respectively, and by rotating the capstan rollers, run the tape in a state pinched between respective pinch rollers and the capstan rollers;

15 a first tension detecting means which is provided between said first capstan roller and said second capstan roller and detects running tape tension; and

20 a capstan roller controlling unit controlling a rotation speed of said first capstan roller and said second capstan roller so that tension detected by said first tension detecting means becomes constant,

wherein said capstan roller controlling unit has a low pass filter attenuating a high frequency component of a tension signal detected by said first tension detecting means.

25 2. A servo writer according to claim 1, wherein said first tension detecting means pulls in said tape in a vacuum chamber and detects tape tension by a negative pressure in the vacuum chamber.

3. A servo writer according to claim 1, wherein a cut-off frequency of said

low pass filter is lower than a response frequency by which a head in a tape drive in which said tape is used is driven in response to a servo signal.

4. A servo writer according to claim 2, wherein a cut-off frequency of said low pass filter is lower than a response frequency by which a head in a tape drive in which said tape is used is driven in response to a servo signal.

5. A servo writer according to claim 1, wherein the cut-off frequency of said low pass filter is not less than 100 Hz and not more than 150 Hz.

6. A servo writer according to claim 2, wherein the cut-off frequency of said low pass filter is not less than 100 Hz and not more than 150 Hz.

10 7. A servo writer according to claim 1, wherein a second tension detecting device is provided at a downstream side of said second capstan roller and a third capstan roller is provided at a downstream side of the second tension detecting device.

8. A servo writer according to claim 7, wherein said first tension detecting means and said second tension detecting means pull in said tape in vacuum chambers and detect tape tension by a negative pressure in the vacuum chambers.

9. A servo writer according to claim 7, wherein the cut-off frequency of said low pass filter is lower than a response frequency by which a head in a tape drive in which said tape is used is driven in response to a servo signal.

20 10. A servo writer according to claim 8, wherein the cut-off frequency of said low pass filter is lower than a response frequency by which a head in a tape drive in which said tape is used is driven in response to a servo signal.

11. A servo writer according to claim 7, wherein the cut-off frequency of said low pass filter is not less than 100 Hz and not more than 150 Hz.

25 12. A servo writer according to claim 8, wherein the cut-off frequency of said

- low pass filter is not less than 100 Hz and not more than 150 Hz.
13. A servo writer according to claim 7, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
- 5 14. A servo writer according to claim 8, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
15. A servo writer according to claim 9, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
- 10 16. A servo writer according to claim 10, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
- 15 17. A servo writer according to claim 11, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
18. A servo writer according to claim 12, wherein an inspection head reading a servo signal written by said write head is provided between said second capstan roller and said second tension detecting device.
- 20 19. A servo writer according to claim 1, wherein said tape is a magnetic tape.
20. A servo writer according to claim 2, wherein said tape is a magnetic tape.